## Written Testimony of Representative Bill Foster (IL-11) Make It in America: What's Next? PANEL 1: American Innovation

Thank you, Mr. Hoyer, for convening these panels and for the opportunity to testify today. Highlighting the need to "Make it in America" is very important to the success and welfare of America's middle class.

Before having the privilege to represent the Eleventh Congressional District of Illinois, I was a businessman and a scientist. When I was 19 years old, my brother and I founded a company manufacturing microprocessor-based lighting control consoles. This company now manufactures over half of the theater lighting equipment in the United States. My brother is still the Chief Executive Officer and the company has maintained its manufacturing facilities in the Midwest, supporting hundreds of good-paying jobs.

Growing the pie means the creation of new things, the demand for new capital, and the jobs to meet these needs. But not all invention and innovation happens in large, highly-funded laboratories or research and development facilities. The business my brother and I founded began its life in my parents' basement with a \$500 investment. I, like many other inventors of my generation, started out by taking apart lawnmowers, radios, televisions and putting them back together.

However, today children are not able to take apart a smartphone and intuitively figure out how it works because so much of the engineering is in the software. We need new ways to foster that interest in learning *how* things work and how to build them better. Doing so will serve as a way to get kids interested in the STEM fields and lay the foundation for a bright future.

To accomplish this, I introduced H.R. 1622, the National Fab Lab Network Act. A fab lab is a set of digitally controlled machine tools that enable you to build just about anything. These are the tools of modern manufacturing: 3D printers, laser cutters, routers, and computer-aided design tools. They can be used to build anything: a bracelet, machine part, or even a fully functioning computer.

My bill would create a federal charter for a non-profit organization called the National Fab Lab Network. A national network of fab labs would give children access to the tools and guidance they need to build things. For a child, turning something they imagine into something they can hold in their hands is a powerful experience. It changes the way they think of themselves. "I make things," becomes part of their identity.

For our nation to prosper and for our economy to grow, America needs makers. Fab labs would also help our nation's existing makers by enabling them to rapidly prototype their idea. Small businesses start with an idea; fab labs give entrepreneurs the tools they need to turn their ideas into realities. Too often, this is the stage would-be businessmen and inventors can't get past. Fab Labs democratize and spread the means to innovate and produce real world products—designed, created, and produced right here in the United States.

From the local to the national scale, invention and innovation drive economic growth. The Congress is positioned to provide the investment and create the environment to drive and nurture the next great idea. Again, I thank Mr. Hoyer for highlighting the need and the opportunity we have to advance American manufacturing.